

AMENDMENTS TO THE CLAIMS

The following list of claims replaces all prior versions, and listings, of claims in the application:

What is claimed is:

Claim 1-7 (withdrawn, without prejudice or disclaimer to the subject matter contained therein)

8. (new) A method of operating a pulse echo ranging system comprising the steps of:
providing a transducer assembly operable to send and receive high frequency acoustic energy;

transmitting, through the transducer assembly, at least two energy pulses having substantially different frequencies;

receiving reflected echoes of at least two energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and

combining the received signals to provide enhanced data.

9. (new) A method according to claim 8, wherein the received signals are summed.

10. (new) A method according to claim 8, wherein the received signals are differenced.

11. (new) A method according to claim 8, wherein a signal received at a second frequency is used as a reference against which the first signal can be compared to provide enhanced data.

12. (new) A pulse-echo ranging system including a control computer programmed to perform the method of claim 8.